

of a single tribe or subfamily of Sawflies, namely the Nematina, including the great genus *Nematus* and its allies. This group, although not so extensive as that of the Tenthredina, which were treated of in the first volume, is the one which presents the greatest difficulties for the descriptive entomologist, as it includes the great genus *Nematus*, of which Mr. Cameron here records 107 British species, many of which are closely allied—in fact so closely that, as in the case of the Lepidoptera, it seems to be necessary in some cases to rear the species, the larvæ presenting decided differences when those between the perfect insects are obscure. The whole number of British species of the group is only 132.

In an Appendix Mr. Cameron indicates certain species to be added to genera treated of in his first volume, and also offers some important remarks upon the subject of parthenogenesis as occurring among the Sawflies, as to which he says, “there seems to be no doubt that the phenomenon is quite common.”

In the matter of illustrations we are even more liberally dealt with now than in the preceding volume; we have here no fewer than twenty-seven plates, and of these thirteen furnish us with coloured representations of the insects and their larvæ, the remainder, with one exception, being occupied by outline figures of the saws of different species. The adoption of colour in the representations of the perfect Sawflies will be an immense advantage to students, and the figures, drawn by Mr. Purkiss and Mr. Edgar Smith, are worthy of all praise. The only difficulty is to know where the plates are to come from to illustrate two more volumes: the figures in those now published carry us quite to the end of the Securiferous Hymenoptera, so that the available material for the illustration of the remainder of the work consists almost wholly of the figures relating to the Cynipidæ. It is to be regretted that the plates could not have been kept throughout to the same volumes which contain the text they illustrate. This, however, is but a minor detail, and one which detracts but little from the value of Mr. Cameron's contributions to the natural history of the Tenthredinidæ, a work the completion of which will be most welcome. British entomologists, using the term in the widest sense, are deeply indebted to the Ray Society for providing them with such books as Mr. Buckton's on the Aphides, Mr. Michael's on the Oribatidæ, and the present work.

Transactions of the Cumberland and Westmoreland Association for the Advancement of Literature and Science. No. IX. 1883-84. Edited by J. G. GOODCHILD. Svo. Carlisle: G. and T. Coward. 1885.

THE ninth volume of this valuable local publication, which has just reached us, contains perhaps rather fewer papers relating to natural-history subjects than its predecessor, which we noticed a twelvemonth ago; but its contents will be of much interest to residents in West-

moreland and Cumberland. Both in bulk and in the number of articles it agrees pretty closely with the preceding volume.

The first of the thirteen articles, the Address of the President, Mr. R. S. Ferguson, has a title which might lead one to expect an anatomical dissertation. It is on "The Formation of the English Palate." But it is not to the structure of that important part of our organization that Mr. Ferguson has directed his attention, but to the gustative functions performed by it; his paper is an amusing digest of information on the art of cookery from the earliest period of which we have any records, with the object of showing in what manner our palates have been trained to their present system of likings and dislikings. Mr. W. Wilson's paper "Thirlmere and its Associations" and Mr. J. B. Bailey's article entitled "Who was the founder of Roman Maryport?" deal with interesting bits of local topographical and antiquarian information, with a good deal of interspersed literature; and the Rev. T. Ellwood's "Poets and Poetry of Cumberland, including the Cumbrian Border," is devoted exclusively to local literature, and will be read with interest outside of the circle to which it is specially addressed.

Coming now to the articles on subjects of natural history we may notice in the first place the conclusion of Mr. Goodchild's "Contributions towards a List of the Minerals occurring in Cumberland and Westmoreland," which treats chiefly of minerals which take part in the formation of crystalline rocks, and has appended to it a general alphabetical index to all the minerals noticed by the author in this and previous parts of his work. Mr. Goodchild also contributes a paper on "The Penrith Sandstone," a semipopular monographic study of the rock, with especial reference to the history of its formation.

Whether it be that the editor, after the fashion of some editors, has unduly put himself forward, or whether there may be some more legitimate mode of accounting for the circumstance, certain it is that we must plead guilty to having violated those *bienséances* embodied in the three words *place aux dames*. And this is the more blamable as Miss Donald's "Notes on some Carboniferous Gasteropoda from Penton and elsewhere" is undoubtedly the most seriously scientific article in the volume. Miss Donald refers *Turritella Urei*, Flem., to *Loxonema*, T. *elongata*, Flem., to *Aclisina*, and *Murchisonia quinquecarinata*, Kon., to *Orthonema*, and describes a new species of *Aclisina* under the name of *A. costatula*, from the study of specimens chiefly obtained from a shale in the Calciferous-Sandstone series. She has also figured the above species and another *Aclisina* in an octavo plate drawn and lithographed by herself.

There are two more geological papers in the volume, namely, some "Notes on the best Locality for Coal beneath the Permian Rocks of West Cumberland," by Mr. T. V. Holmes, in which the author points out the principles which ought to guide those who propose searching for coal in the district in question, and discusses, not always quite harmoniously, the statements made by Mr. J. D. Kendall, in a paper communicated by him in 1883 to the North of England In-

stitute of Mining Engineers; and an article by Dr. J. Leitch, descriptive of "The Geological Formation and Fossils of the new Silloth Dock," recording the beds excavated and the occurrence in different parts of remains of *Cervus elaphus*, *Bos primigenius*, and a species of *Balenoptera*. Some of the bones of *Bos primigenius* are figured on a plate accompanying this paper.

The papers on subjects of recent Natural History are only four in number. Mr. J. C. Smith furnishes "Contributions towards a List of Plants found in the Penrith Neighbourhood," consisting of a list of about 130 species of plants with localities; and Mr. W. Duckworth, the first part of a paper on "Wild Flowers around Carlisle," a pleasant gossiping article on common plants, with many notes upon popular names, and other local particulars worth perusing. Under the head of Zoology we have also two articles: one on "Shrikes," by the Rev. H. A. Macpherson, giving a popular account of the species of *Lanius* found in Britain, and illustrated with a lithographed figure of Pallas's Shrike; the other, the fourth part of Mr. George Dawson's Notes on "Local Entomology," which deals with the moths of the group Cuspidatæ, and embodies some useful notes on the collecting and breeding of those insects. The "Local Scientific Notes and Memoranda" are also of interest, especially those by Mr. T. V. Holmes and Miss Donald's Additions to the local List of land and freshwater Mollusca.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

March 25, 1885.—Prof. T. G. Bonney, D.Sc., LL.D., F.R.S.,
President, in the Chair.

The following communications were read:—

1. "On the Relationship of *Ulodendron*, Lindley and Hutton, to *Lepidodendron*, Sternberg, *Bothrodendron*, Lindley and Hutton, *Sigillaria*, Brongniart, and *Rhytidodendron*, Boulay." By Robert Kidston, Esq., F.G.S.

The Author commenced by expressing an opinion that the so-called genus *Ulodendron* of Lindley and Hutton comprised specimens belonging to several species and even to different genera. Unless the outer surface of the bark is well preserved, stems of Clathrarian *Sigillariæ* and *Lepidodendra* are undistinguishable; but species of *Ulodendron* have been in several cases founded on decorticated examples, and distinguished by such characters as the size of the Ulodendroid scar. The three species which have furnished most of the specimens described as *Ulodendron*, and to the description of which the present paper is chiefly devoted, are *Lepidodendron Vel-*